

CALIFORNIA DEPARTMENT OF JUSTICE

BUREAU OF FORENSIC SERVICES

PHYSICAL EVIDENCE BULLETIN



AUTOMOBILE LIGHTS

Often during a vehicle accident investigation it is important to determine if vehicle lights were on or off at the time of the accident. The procedures below pertain to handling vehicle lamps or any other tungsten bulb.

SCENE INVESTIGATION Observe whether the light switch is "on" or "off". DO NOT, under any circumstances, turn the switch "on" if in the "off" position. Also check the possibility of blown fuses, broken wiring, and dead batteries. All vehicle lamps that are located in and immediately adjacent to the accident impact area should be collected and submitted to the laboratory for examination. This includes the headlights and auxiliary lamps such as turn signals, running lights, side marker lights and license plate lights. If it is not possible to hand carry the evidence to the laboratory, send the material for examination, observing the following:

- 1. Intact vehicle lamps may be carefully removed from the vehicle and submitted as is, well packed with soft cotton or paper, and cushioned in a rigid box.
- 2. Broken lamps and Lamp Housings:
 - a. All available auto lamp glass fragments and plastic lens pieces from the scene must be collected for laboratory examination. A physical match of the broken pieces remaining in the headlamp or a light assembly of a hit and run vehicle can sometimes be achieved. This positively links the vehicle to the scene.
 - b. Carefully dismantle the vehicle headlamp assemblies, insuring that all filaments, filament posts, and glass are included. The headlamp mounting bracket and its hardware may need to be removed. If the broken lamp cannot be readily removed from its socket or wiring harness, cut the wiring and submit the lamp in its socket. Collect al loose debris from the lamp housing/lens assemblies. Determine if the filaments are attached to the filament posts. Attempt to locate the filament if unattached, since most of the important information is detectable only on the filament.
 - e. Carefully package loose posts and filaments for mailing. Be careful not to contact and damage the fragile filaments. Use disposable foam coffee cups or small cardboard boxes to prevent further damage. Use cotton gauze or tissue padding if needed.
 - f. SEPARATELY package the very fragile items from the scene and from the vehicle. Submit to laboratory for examination.
- 3. Properly mark the sealed package and identify contents with an appropriate <u>cover</u> letter so as to permit paperwork processing prior to the examination of the evidence. The standard Request for <u>Physical Evidence</u> Examination form ISB-4 should be included. Include a copy of the accident report since it can aid in the analysis and reconstruction.

<u>LABORATORY INVESTIGATION</u> If sufficient evidence is submitted (including the filament or portions of it) laboratory examination can sometimes determine if a mechanical (cold) break has occurred or whether a lamp or particular filament was on at the time of the incident (accident).

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